

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator C & E Operators, Inc. Well Name and No. Fee Well No. 9-Y
Location: Unit D Sec. 9 Twp. 30-N Rng. 11-W Cty. San Juan

II.

THE DIVISION FINDS:

- (1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.
- (2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.
- (3) That the well for which a finding is sought is completed in the Aztec-Pictured Cliffs Pool, and the standard spacing unit in said pool is 160 acres.
- (4) That a 159.27-acre proration unit comprising the NW/4 of Sec. 9, Twp. 30-N, Rng. 11-W, is currently dedicated to the Brown Well No. 1 located in Unit F of said section.
- (5) That this proration unit is (X) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. _____.
- (6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- (7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 136,000 MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

- (1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

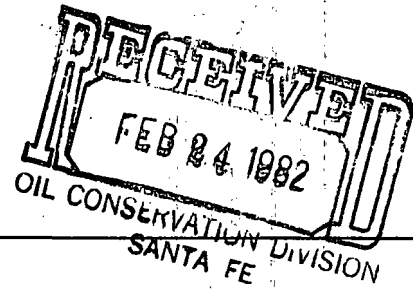
DONE at Santa Fe, New Mexico, on this 24th day of March, 19 82.


DIVISION DIRECTOR

EXAMINER

A. R. "Al" Kendrick

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555



February 22, 1982

Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Approval of Infill Well for Gas Pricing

Dear Mr. Ramey:

We respectfully request that the C & E Operators, Inc. Fee #9-Y well located 152' FNL 910' FWL of Section 9, T30N, R11W be approved as a necessary infill well in the Aztec-Pictured Cliffs Pool to effectively and efficiently drain the spacing unit shared with the Brown #1 well.

The standard spacing unit in the Aztec-Pictured Cliffs Pool is 160 acres.

Enclosed for your consideration are copies of the Permit to Drill, Acreage Dedication Plat, Data Sheet, Structure Map and Map showing the cumulative gas production to 1/1/81.

A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

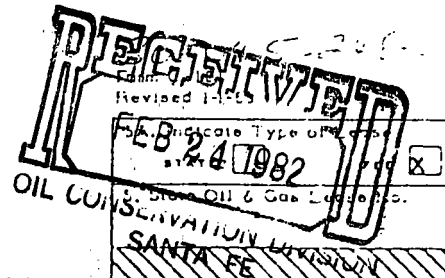
AR Kendrick
A. R. Kendrick

Enclosures

xc: Offset operators

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FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION



APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK			
1a. Type of Work	7. Unit Agreement Name		
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>	8. Farm or Lease Name Fee		
1. Name of Operator C. & E. Operators, Inc.	9. Well No. 9-Y		
2. Address of Operator One Energy Square, Suite 170, Dallas, Texas 75206	10. Field and Pool, or Wellcat Aztec, PC; Blanco MV		
4. Location of Well UNIT LETTER <u>D</u> LOCATED <u>152</u> FEET FROM THE <u>North</u> LINE AND <u>910</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>9</u> T4S. 30N R6E. 11W	17. County San Juan		
19. Proposed Depth 4800'	19A. Formation Mancos	20. History or C.T. Rotary	
21A. Casing & Cement Plug Bond Blanket	21B. Drilling Contractor Young Drilling Co.	22. Approx. Date Work will start 2-10-81	
23. PROPOSED CASING AND CEMENT PROGRAM			

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	9-5/8"	36	250' plus	160 3% CaCl	Surface
8-3/4"	7"	23	4800'	280 1st stg.	3000'
Stage collar @ approx. 2200'				320 2nd stg.	Surface

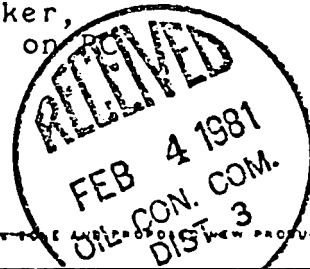
A replacement well for the Fee #9 that was abandoned 2-3-81 due to surface casing problems.

Propose to set 9-5/8" casing w/spud mud and cement back to surface. WOC - 16 hrs. Install BOP's and bleed-off manifold. Press. test to 600 psi. for 30 min. Drill 8-3/4" hole with light gel-chemical mud to TD. Run IES and GRD/N logs. Run and stage cement, 7" casing. Perf., stimulate Mesaverde; set plug. Perf., stimulate and test PC zone. Drill out plug. Clean up Mesaverde. Set Baker Mod. "D" packer, run 2-3/8" tubing w/seal assy. on Mesaverde. Run 1 1/2" tubing on zone. Install dual well head; clean up and test.

Location inside City Limits of Aztec, N. M.

APPROVAL VALID
FOR 60 DAYS UNLESS
DRILLING COMMENCED,

8-3-81



ABOVE SPACE DESCRIBE PROPOSED PROGRAM IF PROPOSAL IS TO DEEPEN OR PLUG BACK EXISTING WELL. IF PROPOSAL IS TO DRILL NEW WELL, GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

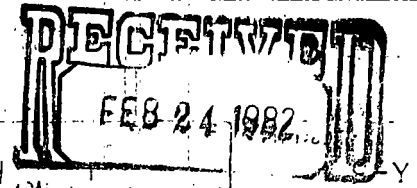
Signed John M. Heller Title Consultant NM Reg. Eng. #4361, P. O. Box 1507, Durango, Co. Date _____

(This space for State Use)

APPROVED BY Frank J. Long TITLE SUPERVISOR DISTRICT #3 DATE FEB 4 1981

CONDITIONS OF APPROVAL, IF ANY:

Handwritten notes: 100-104700-152



All distances must be from the north line of the section.

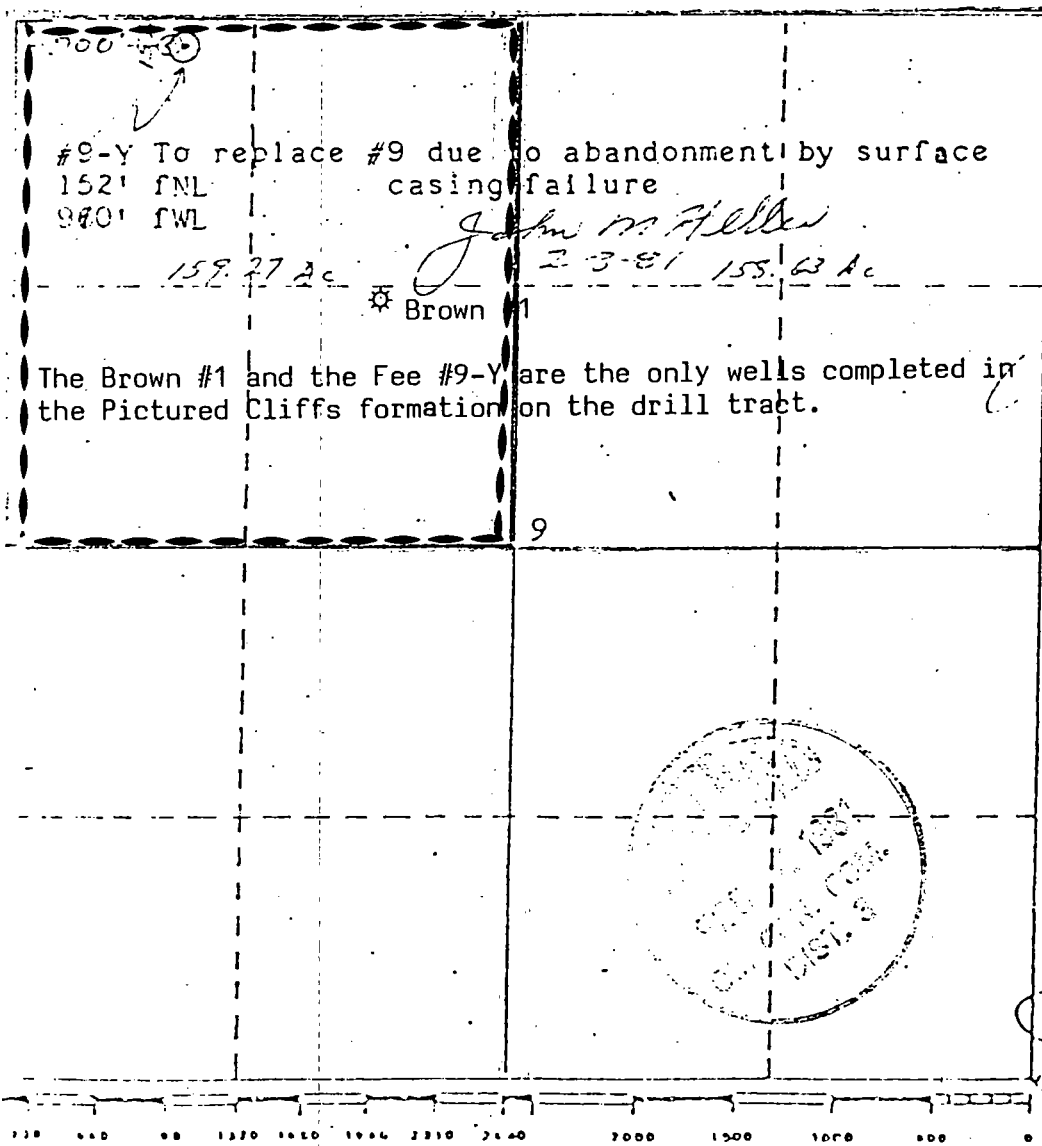
C&E OPERATORS, INC.		FEE						
Letter	Section	Township	Range	County				
	9	30 NORTH	11 WEST	SAN JUAN				
San Juan								
San Juan								
152	feet from the	NORTH	line and	940	feet from the	WEST	line	320
Producing Formation		Pict. Bluffs		Dedicated Acreage		317.9		
115.27		155.63		152.27		160.00		

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation Force-pooling by Communitization on Dec. 10, 1980

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature	<u>John M. Keller</u>
Position	<u>Consultant</u>
Company	<u>C&E Operators</u>
Date	<u>Nov. 24, 1980</u>
Date Surveyed	<u>October 23, 1980</u>
Registered Professional Engineer and/or Land Surveyor	<u>James P. Loese</u>
Certificate No.	<u>1463</u>

DATA SHEET

ORIGINAL WELL:

Operator: C & E Operators, Inc.
Lease: Brown #1
Location: 1390' FNL 1900' FWL Section 9, T30N, R11W
Spud: 5/29/54 Completed: 7/22/54
Stimulation: Shot w/ 175 quarts of solidified nitroglycerin
Mechanical problems: none
Retreatment: Sand/oil fractured 10/4/54 w/ 8401 gallons of oil and
6100 pounds of sand
Current producing rate: 15,521 MCF during 1980

REASON that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture. Four wells are shown on the structure map which have been plugged because of casing failure.

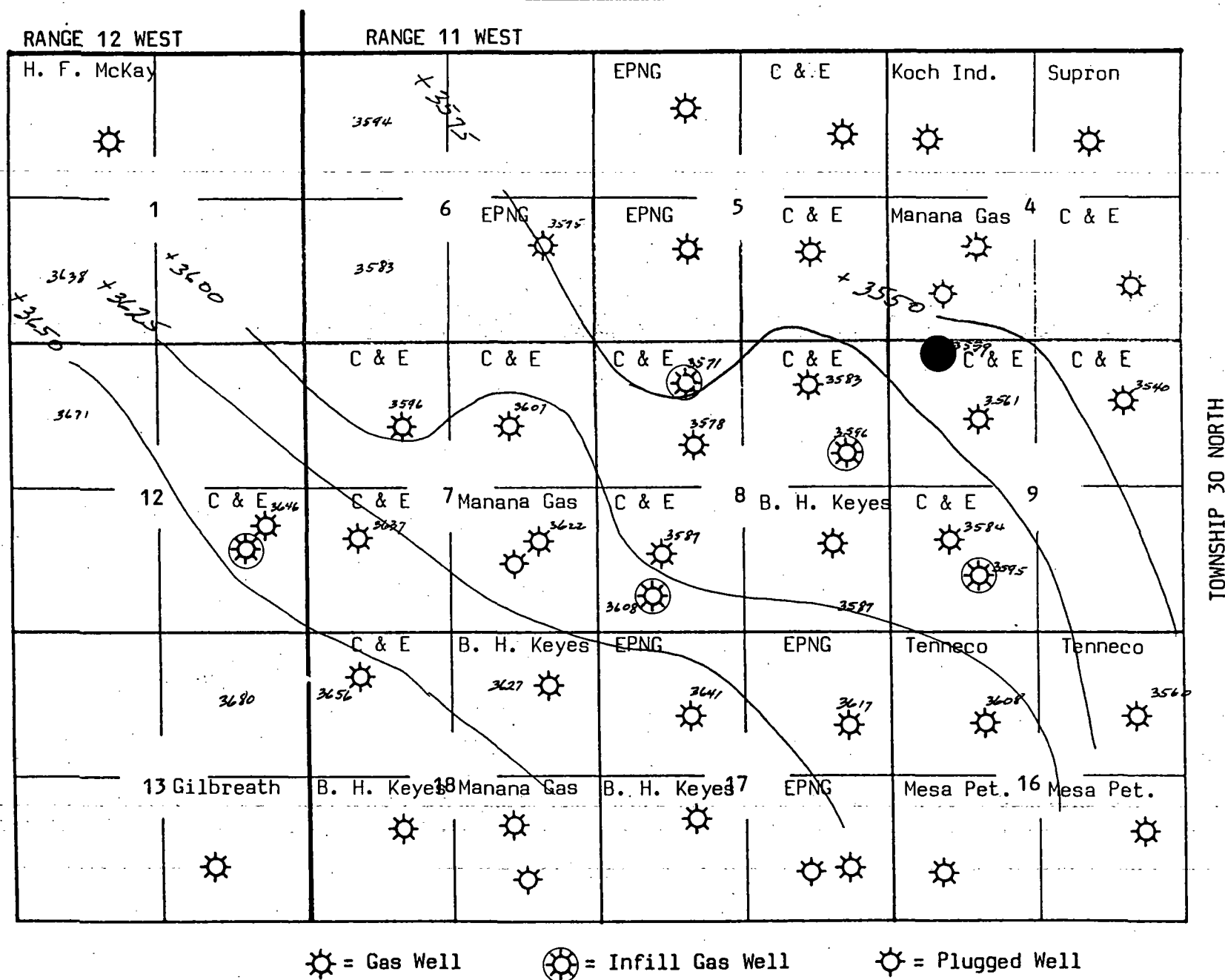
INFILL WELL:

Operator: C & E Operators, Inc.
Lease: Fee #9-Y
Location: 152' FNL 910' FWL Section 9, T30N, R11W
Spud: 2/13/81 Completed: 7/27/81
Stimulation: Sand/foam fracture w/ 70 quality foam and 57,000 pounds of sand.

VOLUME of expected additional recovery: 136 MMCF

BASED on Boyle's Law, if the initial shut-in pressure of 672 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 190 psi measured 10/19/81 represented the remaining recoverable reserves, and considering the production of 796 MMCF having been produced through 10/31/81; then, the remaining recoverable reserves were 231 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 272 psi measured 9/30/81 on the infill well indicates recoverable reserves of 367 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 136 MMCF.

PICTURED CLIFFS STRUCTURE MAP



[illegible]

CITY OF AZTEC

9-6 REGULATION OF THE DRILLING AND PRODUCTION OF OIL AND/OR GAS WELLS

9-6-1 SCOPE:

The scope of this article shall be for the regulation of the drilling and production of oil and/or gas or for liquid hydrocarbons within the City of Aztec, New Mexico, and shall include any well to be used as an injection well for secondary recovery.

9-6-2 PERMITS

Every person, firm, partnership or corporation hereafter desiring to drill a well within the City of Aztec, New Mexico, or rework an existing well shall obtain a permit for the drilling or reworking of such well and the production thereof, such permit to be obtained as follows:

- a. Written application shall be filed therefore with the City Clerk and shall contain the following:
 1. The name of the operator desiring to drill and produce such well.
 2. The exact location of the proposed well together with a description of the area to be occupied by the drilling machinery pits and equipment in the drilling of such well and the area to be occupied by the machinery to be used in the production of such well, and
 3. Names and address of all property owners within 200 feet of well location.
 4. A certificate of insurance which certifies that the operator and all persons who may be engaged in the drilling or operation of such well are insured to the public for any operation in the sum of One Hundred Thousand (\$100,000.00) dollars for damages to any one (1) person, and Three Hundred Thousand Dollars (\$300,000.00) for damages to more than one person, from any one (1) accident; also, for the sum of One Hundred Thousand Dollars (\$100,000.00) for damages to property.
 5. Such application shall be accompanied by a \$350.00 filing fee.
- b. Upon the receipt of all of the above the City Clerk shall establish a hearing date when the application is to be considered by the City Commission. Public notice of the hearing at which the application is to be considered must be given by at least one publication in a newspaper of general circulation in the municipality at least 15 days before the date of the hearing. All property owners within 200 feet of the proposed well location shall be notified of the hearing date by written notice by certified mail, return receipt requested, not less than five days before the date of the hearing.

- c. The City Clerk shall issue a written recommendation for approval or denial to the City Commission at the hearing.
- d. In all matters pertaining to this chapter the City Manager shall advise the City Commission and shall make recommendations concerning all matters pertaining to this chapter.

9-6-3 OBSTRUCTING STREETS BY DRILLING, ETC.:

No well shall be drilled and no permit shall be issued for any well to be drilled at any one location which is within any of the streets or alleys of the City. No such street or alley shall be blocked or encumbered or closed in any drilling, production or pipeline operation except by written permission of the oil and gas inspector and the City Manager and then only temporarily.

9-6-4 PROXIMITY OF WELL, TANKS OR PIPELINES TO BUILDINGS:

No well shall be drilled and no permit shall be issued for any well to be drilled at any location or storage tank to be located which is nearer than two hundred (200) feet to any residence or commercial building without the applicant having first secured the written permission of the City Commission.

No high pressure gas injection well or a compressor used in conjunction with the gas injection well shall be located nearer than two hundred (200) feet to any residential, commercial or industrial structure, except by permission of the City Commission. In exceptional cases for reasons of safety, the City Commission may require that any such facility shall be located at a greater distance than 200 feet to any such structure.

No residential, commercial or industrial structure other than structures necessary to operate the pipeline shall be erected or moved to a location nearer than thirty (30) feet to any pipeline transporting gas when the pipeline operating pressure is greater than 250 PSI unless a greater or lesser distance is recommended by the then applicable ASA Code.

9-6-5 REQUIREMENT FOR OPERATION OF PRODUCING WELL:

Any person, firm partnership or corporation who completes an oil or gas well within the limits of the City of Aztec, New Mexico, shall operate the same in accord with the following provisions:

- a. The area to be occupied by the producing equipment in the event any well located within the City of Aztec is completed as a commercial producer shall be confined to an area not to exceed one hundred (100) feet by one hundred and fifty (150) feet and the 100 feet by 150 feet area to be occupied by the producing equipment shall be enclosed in a chain link fence six (6) feet in height and three (3) strands of barbed wire at the top, which barbed wire strands shall slope outward.

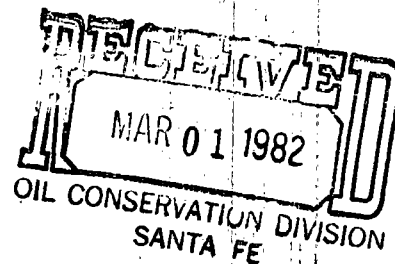
- b. The fence and area referred to in sub-paragraph above shall be landscaped and maintained if such well location is within five hundred (500) feet of a residential lot as described in the City Zoning Ordinance.
- c. Any tank containing oil or distillate shall be located within a dike or fire wall capable of holding one and one-half (1½) times the volume of the tank; and all operations shall be maintained so as not to be a fire hazard and so as not to jeopardize the health and safety of the Citizens of the City of Aztec.
- d. All fluids produced shall be produced into a tank and hauled off the location.
- e. All operations shall be conducted in such a manner so that they will make the least noise possible.

9-6-6 REQUIREMENTS FOR OPERATION OF DRILLING WELL:

Any person, firm, partnership or corporation drilling a well for oil and gas within the limits of the City of Aztec, New Mexico, shall contain all drilling fluids in pits which will be completely covered at the completion of drilling.

9-6-7 PENALTY

Any firm, person, partnership or corporation convicted of drilling or operating a well in violation of the provisions of this article shall be punished by a fine of not less than one hundred dollars (\$100.00) or more than three hundred dollars (\$300.00) and each day that any person, firm, partnership or corporation shall be in violation of this ordinance shall be taken as a separate offense.



A. R. "Al" Kendrick

P. O. Box 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

February 22, 1982

Dear Offset Operator:

If you have no objection to the attached Application for Approval of Infill Well for Gas Pricing, please sign the waiver below and send it to the New Mexico Oil Conservation Division office in Santa Fe, New Mexico.

Yours very truly,

AR Kendrick
A. R. Kendrick

Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

We, as offset operator, hereby waive objection to the Application for Approval of Infill Well for Gas Pricing filed for C & E Operators, Inc.

WELL: Fee #9-Y

LOCATION: D-9-T30N-R11W

OPERATOR: Manana Gas Inc.

BY: Ed Hartman

DATE: 2/25/82

RECEIVED FEB 24 1982

Michael E. Stanger

March 18, 1982

N.M.O. Conservation Division

Infill Well Application
A.R. "A1" Hendrick for C+E Operators
Fee Well No. 9-Y, D-9-730N, R11W, San Juan Co.
Offsetting Brown Well No. 1 in Unit F.

Given: I.S.I.P. = 672 psi,

Current S.I.P. = 190 psi,

Cumulative Production to date = 796 mcf

Abandonment Pressure = 50 psi,

Infill Well S.I.P. = 272 psi.

672 psi - 190 psi = 482 psi,

$\frac{1}{672 \text{ psi}} = 796 \text{ mcf} / 482 \text{ psi}$

$x = 1110 \text{ mcf}$, Original Res. @ 672 psi,

$50 \text{ psi} / 672 \text{ psi} (1110 \text{ mcf}) = 82 \text{ mcf}$, Res. @ Abandonment

1110 mcf

- 796 mcf

314 mcf Remaining Reserves to date

- 82 mcf

232 mcf Remaining Recoverable Res.

$272 \text{ psi} / 672 \text{ psi} (1118 \text{ mcf}) = 449 \text{ Res. of infill well, mcf}$

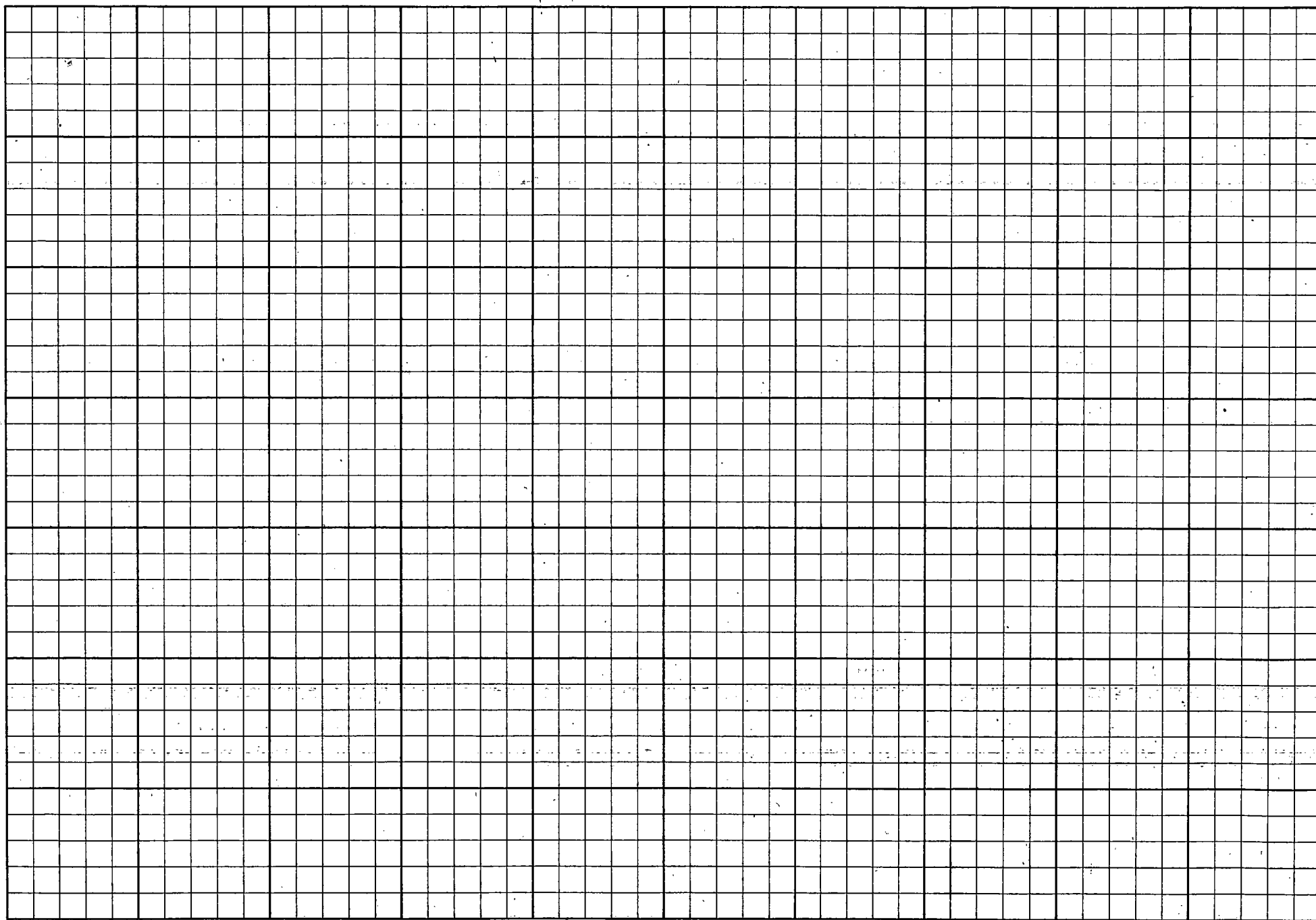
449 mcf

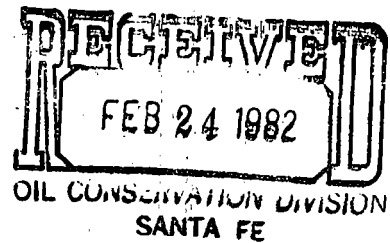
- 82 mcf

367 mcf Rec. Res. of infill well

- 232 mcf

135 mcf, Add'l Res.





A. R. "Al" Kendrick

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

February 22, 1982

Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Approval of Infill Well for Gas Pricing

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The standard spacing unit in the Aztec-Pictured Cliffs Pool is 160 acres.

Enclosed for your consideration are copies of the Permit to Drill, Acreage Dedication Plat, Data Sheet, Structure Map and Map showing the cumulative gas production to 1/1/81.

A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

A handwritten signature in cursive script that reads "A. R. Kendrick".

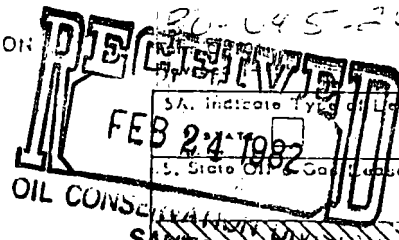
A. R. Kendrick

Enclosures

xc: Offset operators

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION



APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		8. Form or Lease Name Fee	
c. Name of Operator C. & E. Operators, Inc.		9. Well No. 9-Y	
d. Address of Operator One Energy Square, Suite 170, Dallas, Texas 75206		10. Field and Pool, or Willacat Aztec, PC; Blanco MV	
e. Location of Well UNIT LETTER <u>D</u> LOCATED <u>152</u> FEET FROM THE <u>North</u> LINE <u>910</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>9</u> TWP. <u>30N</u> RCP. <u>11W</u>		11. County San Juan	
12. Proposed Depth 4800'		13. Formation Mancos	
14. Drilling Contractor Young Drilling Co.		15. Approx. Date Work will start 2-10-81	

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	9-5/8"	36	250' plus	160 3% CaCl	Surface
8-3/4"	7"	23	4800'	280 1st stg.	3000'
Stage collar @ approx. 2200'				320 2nd stg.	Surface

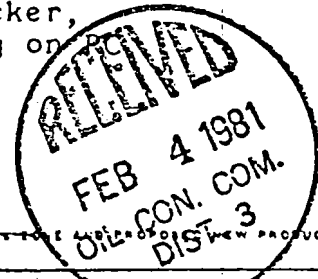
A replacement well for the Fee #9 that was abandoned 2-3-81 due to surface casing problems.

Propose to set 9-5/8" casing w/spud mud and cement back to surface. WOC - 16 hrs. Install BOP's and bleed-off manifold. Press. test to 600 psi. for 30 min. Drill 8-3/4" hole with light gel-chemical mud to TD. Run IES and GRD/N logs. Run and stage cement, 7" casing. Perf., stimulate Mesaverde; set plug. Perf., stimulate and test PC zone. Drill out plug. Clean up Mesaverde. Set Baker Mod. "D" packer, run 2-3/8" tubing w/seal assy. on Mesaverde. Run 1 1/2" tubing on PC zone. Install dual well head; clean up and test.

Location inside City Limits of Aztec, N. M.

APPROVAL VALID
FOR 60 DAYS UNLESS
DRILLING COMMENCED,

8-3-81



ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK EXISTING WELL, DESCRIBE PROPOSED PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

and John M. Haller NM Reg. Eng. #4361, P. O. Box 1507, Durango, Co
Title Consultant Date

(This space for State Use)

APPROVED BY Frank J. Dwyer TITLE SUPERVISOR DISTRICT #3 DATE FEB 4 1981

CONDITIONS OF APPROVAL, IF ANY:

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C-104 for
NSC

RECEIVED
FEB 24 1982

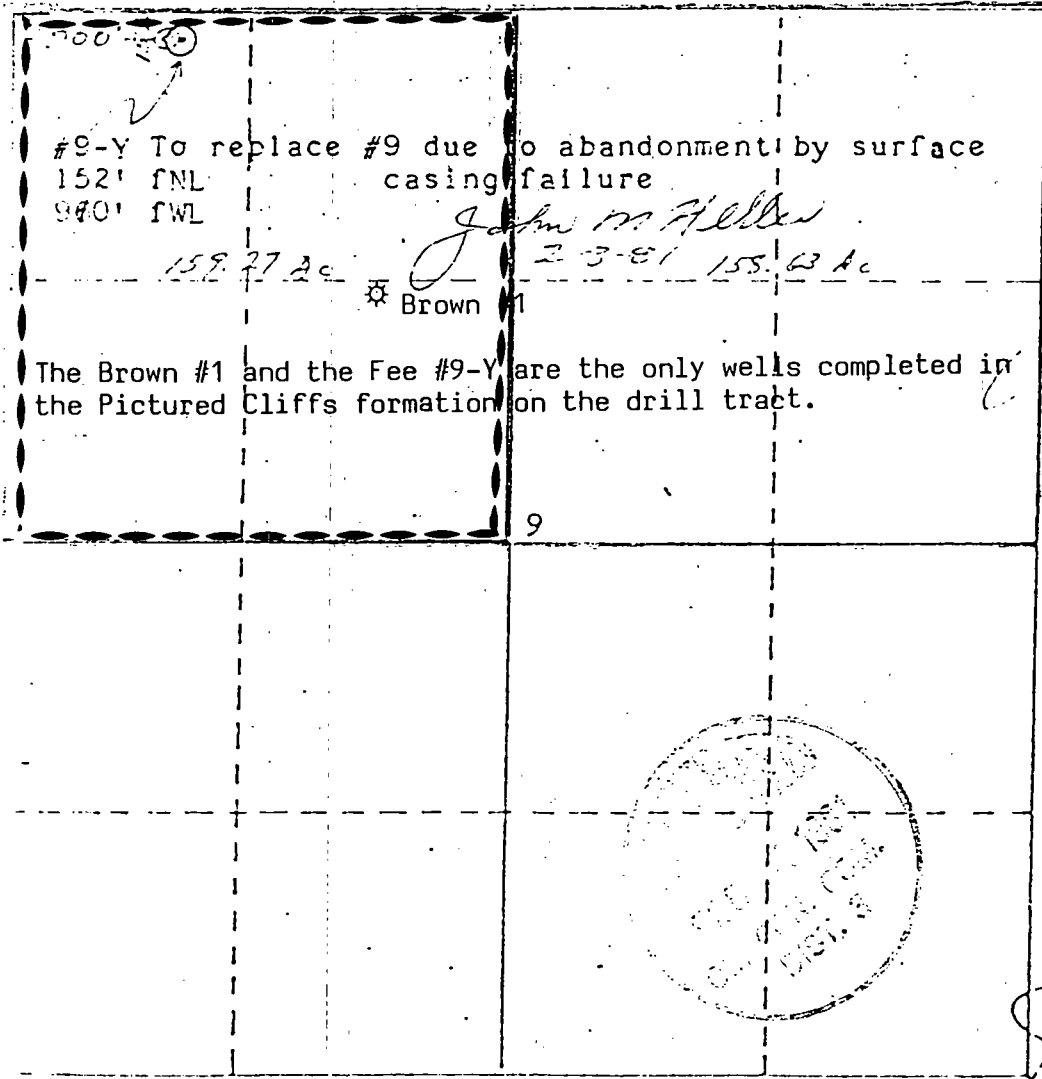
C&E OPERATORS, INC.		FEE		SANTA FE	
Section	9	Township	30 NORTH	Range	11 WEST
152 feet from the NORTH line and		940 feet from the WEST line		Dedicated Acres: 349.9	
Producing Formation: PICTURED CLIFFS		Pool Name: VM		152-27-160, ...	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation: Force Pooling by the well on Dec. 10, 1979.

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: John M. Heller
Position: Consultant
Company: C&E Operators
Date: Nov. 24, 1980

I hereby certify that the information shown on this plat was plotted from field notes and equal survey made by me or under my supervision and that it is true and correct to the best of my knowledge and belief.

PROFESSIONAL ENGINEER AND SURVEYOR
STATE OF NEW MEXICO
JAMES P. LEASE
1463

Date Surveyed: October 23, 1980
Registered Professional Engineer and/or Land Surveyor: James P. Lease
Certificate No.: 1463

DATA SHEET

ORIGINAL WELL:

Operator: C & E Operators, Inc.
Lease: Brown #1
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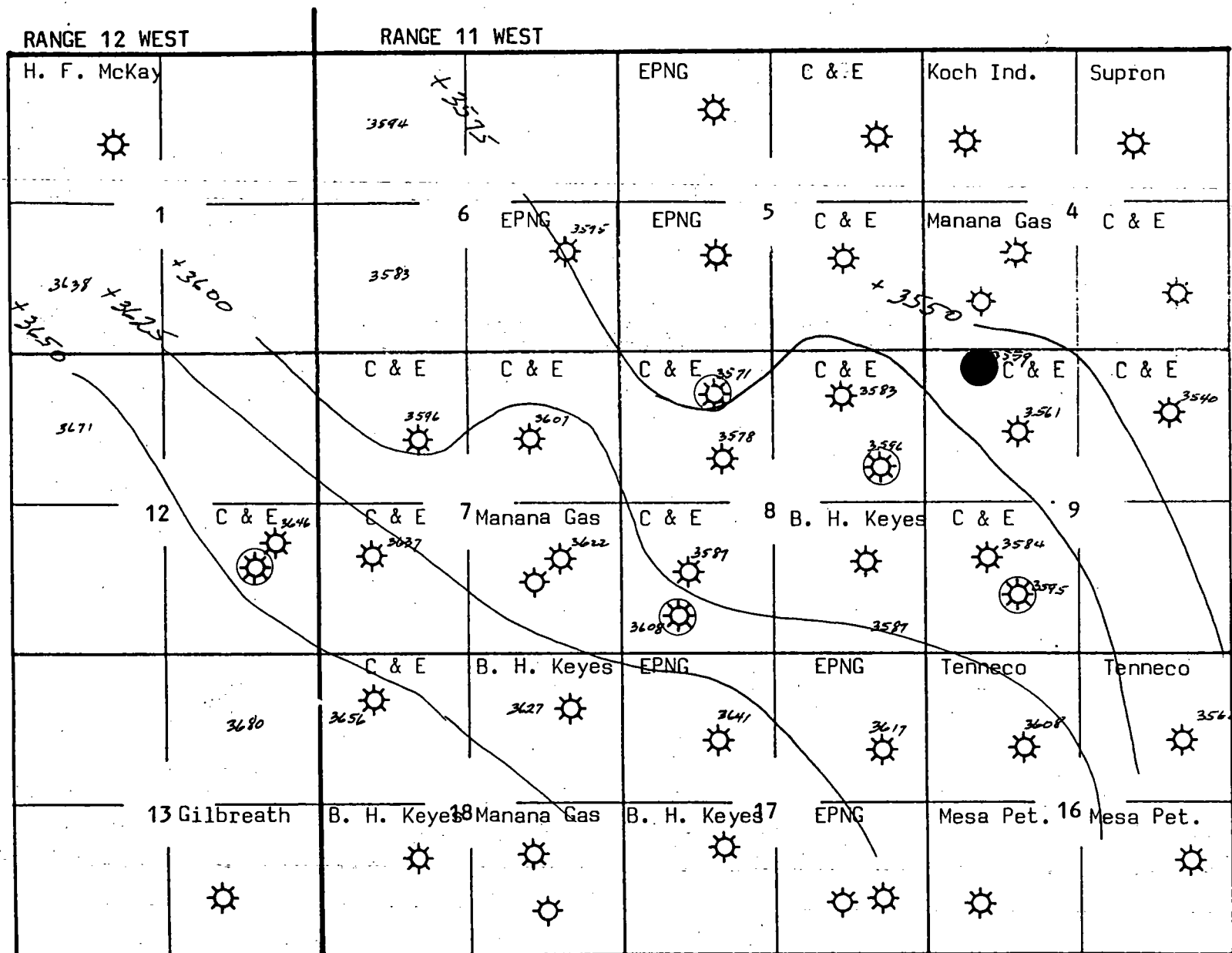
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Lease: Fee #9-Y
Location: 152' FNL 910' FWL Section 9, T30N, R11W
Spud: 2/13/81 Completed: 7/27/81
Stimulation: Sand/foam fracture w/ 70 quality foam and 57,000 pounds of sand.

VOLUME of expected additional recovery: 136 MMCF

BASED on Boyle's Law, if the initial shut-in pressure of 672 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 190 psi measured 10/19/81 represented the remaining recoverable reserves, and considering the production of 796 MMCF having been produced through 10/31/81; then, the remaining recoverable reserves were 231 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 272 psi measured 9/30/81 on the infill well indicates recoverable reserves of 367 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 136 MMCF.

PICTURED CLIFFS STRUCTURE MAP



TOWNSHIP 30 NORTH

☼ = Gas Well ☼ = Infill Gas Well ☼ = Plugged Well

				110	25	139	144	85	159	214	441	275	301	57	113	167	533	750	53	355	1080	2131	351	1014	1690	921	1231	
				5	9	34	21	11	13	21	12	25	31	16	28		45	33	74	69	74	193	159	168	97	75		
				201	222	42	209	156	108	78	167	407	480	278	207		435	174	671	1619	1651	864	2423	258	133	1137		
			5					24	15		21	88	72	23	18	15	20		25	63	120	127	176	186	145	199	5	171
			5					32	73		89	88	557	355	238	157	46		322	365	913	778	2951	2377	500	562	1389	377
									13	13	26	35	26	19	18	13	19	12	35	55	188	53	81	130	246	120	350	
									14	19	44	459	337	270	307	187	174	122	370	982	765	199	267	496	635	150	443	

Bottom number = Cumulative Production
to 1/1/81 (MMCF)

CITY OF AZTEC

9-6 REGULATION OF THE DRILLING AND PRODUCTION OF OIL AND/OR GAS WELLS

9-6-1 SCOPE:

The scope of this article shall be for the regulation of the drilling and production of oil and/or gas or for liquid hydrocarbons within the City of Aztec, New Mexico, and shall include any well to be used as an injection well for secondary recovery.

9-6-2 PERMITS

Every person, firm, partnership or corporation hereafter desiring to drill a well within the City of Aztec, New Mexico, or rework an existing well shall obtain a permit for the drilling or reworking of such well and the production thereof, such permit to be obtained as follows:

- a. Written application shall be filed therefore with the City Clerk and shall contain the following:
 1. The name of the operator desiring to drill and produce such well.
 2. The exact location of the proposed well together with a description of the area to be occupied by the drilling machinery pits and equipment in the drilling of such well and the area to be occupied by the machinery to be used in the production of such well, and
 3. Names and address of all property owners within 200 feet of well location.
 4. A certificate of insurance which certifies that the operator and all persons who may be engaged in the drilling or operation of such well are insured to the public for any operation in the sum of One Hundred Thousand (\$100,000.00) dollars for damages to any one (1) person, and Three Hundred Thousand Dollars (\$300,000.00) for damages to more than one person, from any one (1) accident; also, for the sum of One Hundred Thousand Dollars (\$100,000.00) for damages to property.
 5. Such application shall be accompanied by a \$350.00 filing fee.
- b. Upon the receipt of all of the above the City Clerk shall establish a hearing date when the application is to be considered by the City Commission. Public notice of the hearing at which the application is to be considered must be given by at least one publication in a newspaper of general circulation in the municipality at least 15 days before the date of the hearing. All property owners within 200 feet of the proposed well location shall be notified of the hearing date by written notice by certified mail, return receipt requested, not less than five days before the date of the hearing.

- c. The City Clerk shall issue a written recommendation for approval or denial to the City Commission at the hearing.
- d. In all matters pertaining to this chapter the City Manager shall advise the City Commission and shall make recommendations concerning all matters pertaining to this chapter.

9-6-3 OBSTRUCTING STREETS BY DRILLING, ETC.:

No well shall be drilled and no permit shall be issued for any well to be drilled at any one location which is within any of the streets or alleys of the City. No such street or alley shall be blocked or encumbered or closed in any drilling, production or pipeline operation except by written permission of the oil and gas inspector and the City Manager and then only temporarily.

9-6-4 PROXIMITY OF WELL, TANKS OR PIPELINES TO BUILDINGS:

No well shall be drilled and no permit shall be issued for any well to be drilled at any location or storage tank to be located which is nearer than two hundred (200) feet to any residence or commercial building without the applicant having first secured the written permission of the City Commission.

No high pressure gas injection well or a compressor used in conjunction with the gas injection well shall be located nearer than two hundred (200) feet to any residential, commercial or industrial structure, except by permission of the City Commission. In exceptional cases for reasons of safety, the City Commission may require that any such facility shall be located at a greater distance than 200 feet to any such structure.

No residential, commercial or industrial structure other than structures necessary to operate the pipeline shall be erected or moved to a location nearer than thirty (30) feet to any pipeline transporting gas when the pipeline operating pressure is greater than 250 PSI unless a greater or lesser distance is recommended by the then applicable ASA Code.

9-6-5 REQUIREMENT FOR OPERATION OF PRODUCING WELL:

Any person, firm partnership or corporation who completes an oil or gas well within the limits of the City of Aztec, New Mexico, shall operate the same in accord with the following provisions:

- a. The area to be occupied by the producing equipment in the event any well located within the City of Aztec is completed as a commercial producer shall be confined to an area not to exceed one hundred (100) feet by one hundred and fifty (150) feet and the 100 feet by 150 feet area to be occupied by the producing equipment shall be enclosed in a chain link fence six (6) feet in height and three (3) strands of barbed wire at the top, which barbed wire strands shall slope outward.

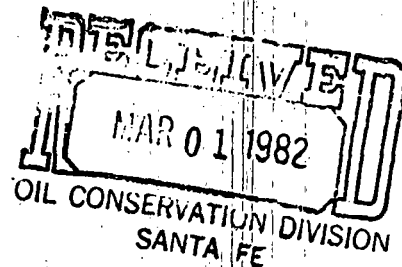
- b. The fence and area referred to in sub-paragraph above shall be landscaped and maintained if such well location is within five hundred (500) feet of a residential lot as described in the City Zoning Ordinance.
- c. Any tank containing oil or distillate shall be located within a dike or fire wall capable of holding one and one-half (1½) times the volume of the tank; and all operations shall be maintained so as not to be a fire hazard and so as not to jeopardize the health and safety of the Citizens of the City of Aztec.
- d. All fluids produced shall be produced into a tank and hauled off the location.
- e. All operations shall be conducted in such a manner so that they will make the least noise possible.

9-6-6 REQUIREMENTS FOR OPERATION OF DRILLING WELL:

Any person, firm, partnership or corporation drilling a well for oil and gas within the limits of the City of Aztec, New Mexico, shall contain all drilling fluids in pits which will be completely covered at the completion of drilling.

9-6-7 PENALTY

Any firm, person, partnership or corporation convicted of drilling or operating a well in violation of the provisions of this article shall be punished by a fine of not less than one hundred dollars (\$100.00) or more than three hundred dollars (\$300.00) and each day that any person, firm, partnership or corporation shall be in violation of this ordinance shall be taken as a separate offense.



A. R. "Al" Kendrick

P. O. Box 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

February 22, 1982

Dear Offset Operator:

If you have no objection to the attached Application for Approval of Infill Well for Gas Pricing, please sign the waiver below and send it to the New Mexico Oil Conservation Division office in Santa Fe, New Mexico.

Yours very truly,

AR Kendrick
A. R. Kendrick

Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

We, as offset operator, hereby waive objection to the Application for Approval of Infill Well for Gas Pricing filed for C & E Operators, Inc.

WELL: Fee #9-Y

LOCATION: D-9-T3ON-R11W

OPERATOR: Manana Gas Inc.

BY: Ed Hartman

DATE: 2/25/82

RECEIVED FEB 24 1982

Michael E. Stagner

March 18, 1982

McMCI Conservation Division

Infill Well Application
A.R. "H1" Hendrick for C&E Operators
Fee Well No. 9-Y, D-9-730-N, K1112, San Juan Co.
Offsetting, Brown Well No. 1 in Unit F.

Given: I.S.I.P. = 672 psi.

Current S.I.P. = 190 psi.

Cumulative Production to date = 796 mmtcf

Abandonment Pressure = 50 psi.

Infill Well S.I.P. = 272 psi.

672 psi. - 190 psi. = 482 psi.

$\frac{7}{672}$ psi. = 796 mmtcf / 482 psi.

$x = 1110$ mmtcf, Original Res. @ 672 psi.

$50 \text{ psi} / 672 \text{ psi} (1110 \text{ mmtcf}) = 82 \text{ mmtcf}$, Res. @ Abandonment

1110 mmtcf

- 796 mmtcf

314 mmtcf Remaining Reserves to date

- 82 mmtcf

232 mmtcf Remaining Recoverable Res.

$2720 \text{ psi} / 672 \text{ psi} (1116 \text{ mmtcf}) = 449$ Res. of infill Well, mmtcf

449 mmtcf

- 82 mmtcf

367 mmtcf Res. Res. of infill Well

- 232 mmtcf

135 mmtcf, Add'l Res.



42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE